

REPORT OF FINDINGS

ON IMPROVING THE TECHNICAL, MANAGERIAL AND FINANCIAL CAPACITY OF MAINE'S PUBLIC WATER SYSTEMS

CAPACITY DEVELOPMENT WORKGROUP
TO THE
MAINE DEPARTMENT OF HUMAN SERVICES



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EXECUTIVE SUMMARY

During 1999 and 2000, the Capacity Development Workgroup (Workgroup) to the Maine Department of Human Services (DHS) considered the challenge of improving the technical, financial, and managerial (TFM) capabilities of public water systems. This *Report of Findings* presents the work of the Workgroup for consideration by the general public and DHS management. Guidance for the Workgroup in preparing this report came generally from the Safe Drinking Water Act (SDWA) Amendments of 1996. At the heart of this report are the Workgroup's recommendations regarding the programs that the DHS Drinking Water Program could strengthen or establish that would assist water systems in building capabilities to achieve compliance with the requirements of the SDWA.

This document serves as a "report card" as to where agencies can best help drinking water systems in need of assistance. No DWSRF funds will be allocated based upon ranking schemes presented in this report.

The body of the report is presented in five sections, labeled alphabetically. This is an intentional correspondence with the language in the SDWA, which lays out the five elements that a state must consider when preparing a Capacity Development Strategy.

SECTION A: IDENTIFYING SYSTEMS IN NEED OF TECHNICAL, FINANCIAL, AND MANAGERIAL ASSISTANCE

A multi-level ranking scheme was adopted, in which compliance with the drinking water regulations was a primary factor. Water systems failing to comply with regulations are more likely to lack technical, financial, or management capacity. Non-complying systems will be assessed to determine the seriousness of the capacity-related problems they are experiencing. These problems will be ranked as critical, serious, minor, potential, and those that request assistance. Water systems in the five classes will be ranked additionally by their willingness to work with DHS in achieving solutions.

SECTION B: FACTORS THAT ENHANCE OR IMPAIR WATER SYSTEM CAPACITY DEVELOPMENT

Factors operating at the Federal, State, and local level that enhance or impair water system capacity are presented in this section of the report. These factors were drawn from the experience of Workgroup members.

The Workgroup identified 237 factors at the Federal, State and local levels that are either enhancements or impairments to drinking water system TFM capacity. Enhancements and impairments were further divided into six categories: Institutional, Regulatory, Financial, Tax, Legal and Other. These are displayed in Table E1.

Table E1: Federal, State, and Local Factors that Affect Water System Technical, Managerial, and Financial Capacity

| Factors | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 28 | 43 |
| Regulatory | 22 | 39 |
| Financial | 24 | 37 |
| Tax | 9 | 6 |
| Legal | 4 | 8 |
| Other | 6 | 11 |
| Total | 93 | 144 |

SECTION C: RECOMMENDATIONS ON HOW THE STATE CAN USE ITS AUTHORITY AND RESOURCES TO HELP WATER SYSTEMS IMPROVE CAPACITY

In developing the conclusions drawn from analyzing the enhancements and impairments noted in Section B, the Workgroup identified 21 recommendations as to how the resources of the State and other stakeholders could be utilized to help water systems improve TFM capabilities. The 21 non-prioritized elements are outlined below, and presented in full within the *Report of Findings*.

1. DHS should develop and utilize an enhanced sanitary survey that will permit DHS field staff to periodically collect TFM information about each of the State's regulated water systems, which can be used to determine those systems most in need of TFM assistance.
2. A self-assessment tool should be developed so that water systems can examine their capabilities and determine what type of assistance would provide the most benefit.
3. Training should be provided to water system personnel in fiscal capacity and financial management.
4. When feasible, DHS should use third party, rather than governmental, studies to show that efficiencies can be gained through consolidation.
5. The Public Utilities Commission of Maine should continue to work for changes in their statutory and regulatory authorities to improve the manner in which that agency regulates small public drinking water systems.
6. Training in managerial and financial capacity elements will be needed for contractors, consultants, and other service providers.
7. Water metering requirements already contained within Maine regulation should be enforced so that water systems know how much water they are using. The Workgroup recommends meters at the treatment plant rather than individual meters.
8. The DHS should cooperate with communities and cities to ensure that public water system capacity issues are actively considered during planning activities.
9. The State Drinking Water Program should enhance its efforts in providing early notice of impending rule changes or new regulatory requirements.
10. Training in technical, financial, and managerial capacity factors will be needed for DHS Drinking Water Program staff.
11. Consider the possibility of creating a loan guarantee fund to assist small water systems in obtaining private financing for capital improvements.
12. The State of Maine should change current State statutes to reflect the national trends that private water providers be eligible for appropriate DWSRF loan funds and grants.
13. A handbook on drinking water statutes and regulations should be prepared for water system operators and managers in order to facilitate understanding and compliance.
14. The DHS should encourage cooperation among State agencies and between Federal and local levels of government on matters affecting drinking water systems at every reasonable opportunity.
15. The DHS should take a proactive approach in educating the public with regards to TFM. The Workgroup recommended six ideas in which the DHS could improve public involvement and enlightenment.
16. The overall success of the State's Capacity Development Strategy will depend in part on the Drinking Water Program's acquisition of appropriate financial and personnel resources to design, promote and deliver TFM assistance programs. The Workgroup proposed ideas on how it could assist in this process.

17. A water system planning handbook should be developed to help water systems develop and implement a planning process aimed at ensuring technical, financial, and managerial capacity.
18. An education program should be developed to assist water systems in preparing accurate and useful Consumer Confidence Reports.
19. Develop and implement a training and assistance program to ensure that water systems maintain practical and up-to-date capital facilities plans. This will enable the systems to anticipate their revenue needs and make repairs and improvements in a non-emergency fashion.
20. DHS should encourage water systems to develop networks for peer review, information exchange, and sharing of technical resources.
21. Longer term, DHS may choose to move toward a “Massachusetts Model” for capacity assistance. This consists of a regularly scheduled forum, involving DHS and a circle of potential service providers, at which systems needing capacity assistance are matched with the services they need.

SECTION D: MEASURING THE SUCCESS OF MAINE’S CAPACITY DEVELOPMENT STRATEGY

In designing its *Report of Findings*, the Workgroup noted in Section D how the DHS might assess the performance of capacity building efforts. Three general measures of success were developed:

1. The DHS could note changes in compliance performance, both statewide and on a system-specific basis.
2. The DHS should keep detailed records of assistance programs designed to assist water systems in improving capacity using means such as: the number of enhanced sanitary surveys conducted; site visits for technical assistance; tally of specified training events, attendance, and tracking continuing education units (CEUs); number of certified operators; and the number of water systems that request self-assessment tools.
3. The DHS could keep track of the number of water systems that prepare water system plans, emergency plans, and other activities that contribute directly to enhanced capacity.

SECTION E: PUBLIC INVOLVEMENT IN PREPARING THE MAINE CAPACITY DEVELOPMENT REPORT OF FINDINGS.

The final section of the Workgroup’s *Report of Findings* provides recommendations on how the broadest possible involvement by citizens and stakeholders could be obtained in gathering information, opinions, and ideas on how to build the capacity of drinking water systems.

GLOSSARY OF TERMS AND ACRONYMS USED IN THIS REPORT

Capacity: Refers to the capabilities required of a public water system in order to achieve and maintain compliance with the drinking water rules. It has three elements:

Technical: Technical capacity or capability means that the water system meets standards of engineering and structural integrity necessary to serve customer needs. Technically capable water systems are constructed, operated, and maintained according to accepted standards.

Financial: Financial capacity or capability means that the water system can raise and properly manage the money it needs to operate efficiently over the long term.

Managerial: Managerial capacity or capability means that the water system's management structure is capable of providing proper stewardship of the system. Governing boards or authorities are actively involved in oversight of system operations.

CCR: Consumer Confidence Report – An annual water quality report required by the 1996 SDWA amendments, which summarizes information on source water, levels of any detected contaminants, compliance with drinking water rules, and educational material.

CEU: Continuing Education Unit – Formal credit for participation in education and training programs, often necessary for maintaining certification or licensing status.

DHS: Department of Human Services – This agency is responsible for administering the drinking water standards in Maine through a primacy agreement with US EPA.

DWSRF: Drinking Water State Revolving Loan Fund – Congress authorized this fund in 1996. The Maine Department of Human Services administers the DWSRF.

EFC: Environmental Finance Center at Boise State University – An organization that operates under a US EPA charter to provide assistance to States and communities on matters concerned with financial management and access to financial assistance.

PUC: Public Utilities Commission – This State agency has regulatory responsibility for many drinking water systems that are privately owned and operated.

SDWA: The Safe Drinking Water Act – Passed by the US Congress in 1974 and amended in 1986 and 1996.

SNC: Significant Non-Compliance – A list of drinking water systems which, in a manner specific to various drinking water rules, have been out of compliance for a significant period of time as per US EPA regulations.

TFM: Technical, Financial, and Managerial – This abbreviation is used to save space in the report and avoid frequent repetition of these terms, defined previously as capacity.

US EPA: US Environmental Protection Agency – This federal agency oversees State primacy programs and provides financial support. One of US EPA's functions is to determine when a State's capacity development program is in compliance with the Safe Drinking Water Act.

Workgroup: This advisory group is composed of drinking water stakeholders from both the public and private sectors and was created to provide DHS with recommendations in formulating a Capacity Development Strategy for the State of Maine.

INTRODUCTION TO CAPACITY DEVELOPMENT: SAFE DRINKING WATER ACT (SDWA)

Water system capacity is the ability to plan for, achieve, and maintain compliance with applicable drinking water standards. Based upon the research and technical assistance efforts of water works professionals, capacity is defined as having three components: technical, financial, and managerial. Adequate capability in all three areas is necessary for a successful public water system.

Capacity development is the process of water systems acquiring and maintaining adequate technical, financial, and managerial capabilities to assist them in providing safe drinking water. The Safe Drinking Water Act's (SDWA) capacity development provisions provide a framework for States and water systems to work together to help ensure that systems acquire and maintain the technical, managerial, and financial capacity needed to meet the SDWA's public health protection objectives.

The 1996 SDWA Amendments include requirements for States to obtain authority to assure that new systems are viable, to develop a strategy to address the capacity of existing systems, and to ensure that potential Drinking Water State Revolving Fund (DWSRF) recipients have sufficient technical, financial, and managerial (TFM) capacity prior to receiving loan funds (or that the loan funds will allow them to achieve capacity). The SDWA outlines several items to include in States' capacity development strategies for existing systems; however it is not mandated that States *must* include each of these items, but rather that they must *consider* each of the items in developing the strategy. Clearly, including each of the required elements produces a comprehensive capacity development program for the State and addresses all of the necessary issues. However, each State must examine each of the issues and determine those elements that best fit the needs of the State.

SDWA §1420(c)(2) addresses the requirements of strategies developed by each State to improve the technical, financial, and managerial capacity of public water systems under their jurisdiction. The development of the State's strategy is directly related to the level of financial resources available to help pay for water system improvements. A State that does not develop and implement a Capacity Development Strategy will receive only 90 percent of the DWSRF allotment it would otherwise receive in FY 2001, 85 percent of its scheduled allotment in FY 2002, and only 80 percent of its scheduled allotment in each subsequent fiscal year.

In developing and implementing a Capacity Development Strategy, SDWA §1420(c)(2) (A-E) requires States to "consider, solicit public comment on, and include as appropriate" five elements:

- Methods or criteria to prioritize systems [§1420(c)(2)(A)]
- Factors that encourage or impair capacity development [§1420(c)(2)(B)]
- How the State will use the authority and resources of the SDWA [§1420(c)(2)(C)]
- How the State will establish the baseline and measure improvements [§1420(c)(2)(D)]
- Procedures to identify interested persons [§1420(c)(2)(E)]

The Maine Capacity Development Workgroup chose to prepare a comprehensive *Report of Findings* that includes consideration of all SDWA-required Capacity Development Strategy elements.

MAINE'S CAPACITY DEVELOPMENT WORKGROUP MEMBERS

The Maine Capacity Development Workgroup, (Workgroup), an important assembly of drinking water stakeholders, began work toward developing this *Report of Findings* in March of 2000. In addition to the Workgroup members listed below, other individuals and organizations were invited to participate in this work. An extensive mailing was conducted to solicit interest in serving with the Workgroup. The purpose was to form a stakeholder group that would represent the broadest possible spectrum of interested parties while at the same time respecting the need to keep the group small enough to function efficiently. Additionally, a number of individuals who were not formally appointed chose to voluntarily attend the Workgroup meetings and were able to contribute materially to the Workgroup's efforts. Provisions were made to expand the public involvement process by the following means:

- A mailing list of persons or organizations was developed so that periodic updates could be provided.
- A decision was made to present the initial recommendations of the group to the public through a series of public workshops.
- Organizations that publish newsletters were asked to convey information about the Workgroup's activities.

These measures, taken together, helped to ensure that the public would have multiple opportunities to learn about and provide input to the capacity development activities. A record of the Workgroup's meetings is found in Appendix A.

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SECTION A: IDENTIFYING SYSTEMS IN NEED OF TECHNICAL, FINANCIAL, AND MANAGERIAL ASSISTANCE

Background

The key issue in designing the State's Capacity Development Strategy is identifying and prioritizing those public water systems that are most in need of improving TFM capacity to deliver safe drinking water to the public. At the core of this discussion is this question: "What information about water systems does the DHS or other stakeholders have that helps identify problems that need to be addressed?" Care was taken to identify and consider the variety of sources for information about the TFM conditions of water systems. Ultimately, the Workgroup determined the following:

- The best and most current information (consistent and verifiable) for providing an indication of the capabilities of public water systems is the technical compliance information maintained by the DHS. Some financial and management capacity information is maintained by the DHS.
- The State drinking water program already has well defined mechanisms in place for dealing with acute risks to public health. Public notification, boil water advisories where appropriate, and immediate corrective actions are all undertaken when pathogenic organisms or high levels of chemical contaminants are detected in a water supply. Consequently, the Capacity Development Strategy will not be expected to deal with these emergency situations.
- A pattern of non-compliance will often serve as an indication that a water system lacks TFM capacity. Failures to monitor, frequent recurrences of coliform bacteria in the distribution system, variations in water quality leaving treatment facilities and other symptoms of this nature should trigger an assessment of a water system's TFM capabilities.
- An overwhelming majority of violations of the drinking water rules occur in very small drinking water systems (serving 500 or fewer individuals). System size was not a basis for prioritization. Larger systems in general are not on the SNC list.

- The purpose of the prioritization scheme was not to decide which systems would or would not receive assistance, but was aimed more at determining the order in which systems would be given attention. Because the Capacity Development Strategy will become an ongoing element of the State's drinking water program, it should be possible to eventually serve all systems that truly need capacity assistance.
- There is a need to collect additional information about the water systems to determine TFM capacity in order to deliver specific assistance to meet T, F, or M capacity deficiencies.

Identification and Prioritization

The Workgroup deliberated the issue of how current information could be used to identify and prioritize systems needing TFM capacity building. Discussions occupied portions of two meetings. As a result of the considerations identified above the ranking scheme illustrated in the flowchart on the following page (Table A1) was adopted. Systems would be chosen for attention under the strategy based on their compliance record as a first screening. A hierarchy of violation types, based on public health risk, was adopted from the Iowa Dept. of Natural Resources by the Water Supply Section staff (Table A2, Items 2-6). This hierarchy will be used to assign compliance problems to **critical, serious, minor, potential, or request assistance** categories. Systems will be ranked according to the relative seriousness of the problems of that system. A final consideration in determining which systems to assist would be the willingness of the water system to cooperate with the State in addressing its problems.

The nature of the assistance offered under the capacity development program should be determined only after an assessment of the technical, financial, and managerial capacity of the water systems that are ranked highest. TFM capacity review could be accomplished by a self-assessment, by an "enhanced" sanitary survey carried out by the State, or by a third party evaluation conducted on site with the system's cooperation. Section C of this report discusses several of these assessment tools.

Table A1: DHS Identification and Prioritization Ranking Schematic Based on the Iowa Dept. of Natural Resources Model.

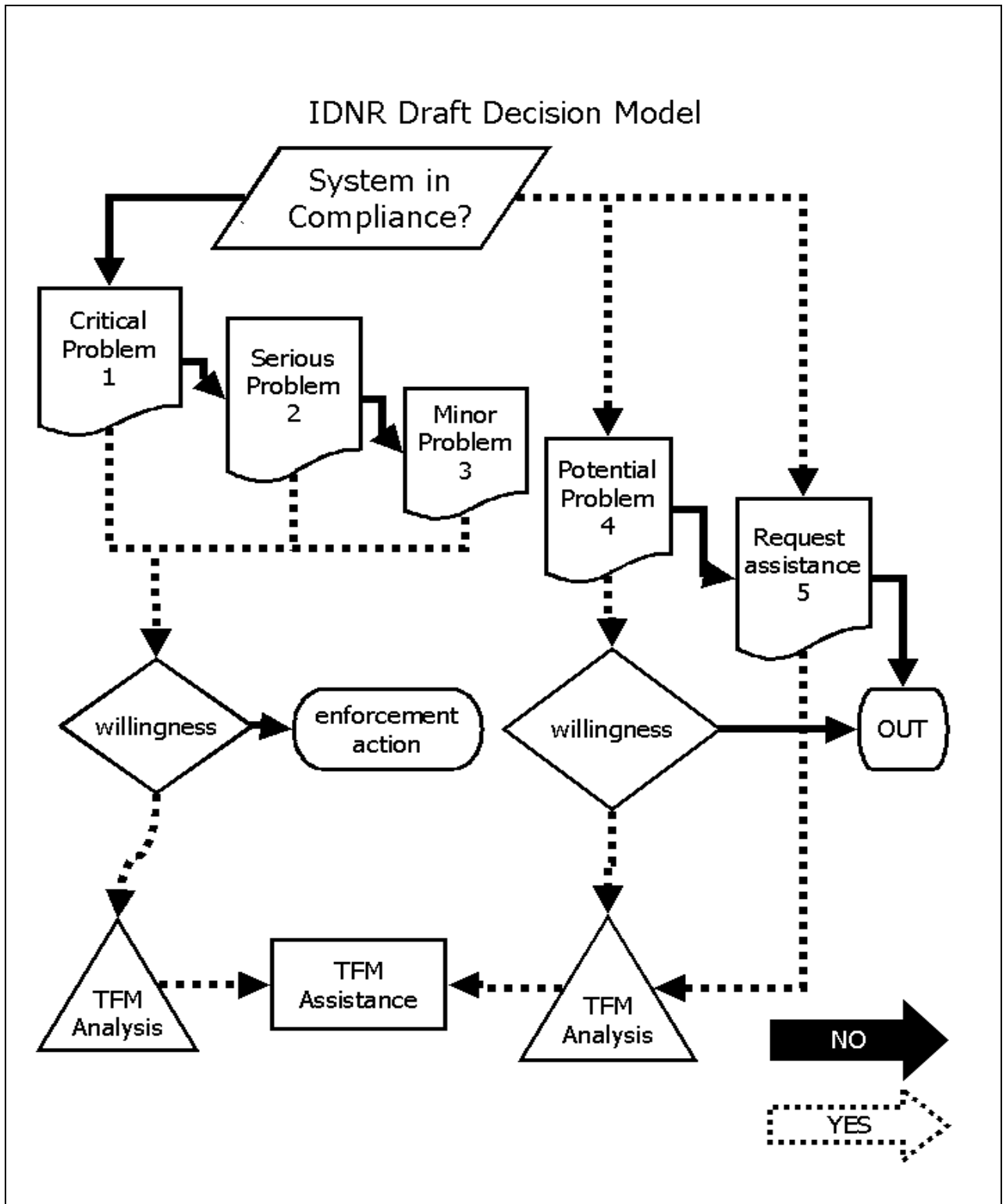


Table A2: Maine's 1420(c)(2)(A) Criteria Definitions

1. **Compliance** – Conformance to the requirements of the Safe Drinking Water Act.
2. **Critical Problem** – Continued exceedance of an acute health based standard, or lack of monitoring for an acute contaminant. An acute contaminant is defined as a compound that, if ingested, may rapidly induce a severe and unacceptable impact on drinking water consumers. Health based standards are promulgated by the Environmental Protection Agency for both regulated and unregulated contaminants.
3. **Serious Problem** – Continued exceedance of a non-acute health based standard, or lack of monitoring for a non-acute contaminant. A non-acute contaminant is defined as a compound that, if chronically ingested, may induce a gradual unacceptable impact on drinking water consumers. Health based standards are promulgated by the Environmental Protection Agency for both regulated and unregulated contaminants.
4. **Minor Problem** – Minor problems are defined as sporadic or one-time exceedances of a health based standard or lack of contaminant monitoring.
5. **Potential Problems** – Potential problems are defined as problems that may lead to critical or serious problems in the future, or circumstances that may culminate in a problem due to tightening of current regulations.
6. **Willingness of Resolution** – Systems that are willing to take action to resolve inadequate technical, managerial, or financial capacity.
7. **Enforcement Action** – An action against a public water supply initiated by the Department or the attorney general to enforce the rules. An enforcement action begins when the Department issues an administrative order to the person when the Department notifies a person in writing of intent to recommend referral or the commission refers the action to the attorney general, or when the attorney general institutes proceedings, whichever occurs first.
8. **TFM Analysis** – Analysis, via the Self-Assessment Manual for Maine Water System Viability, or a system's technical, financial, and managerial capability to produce safe drinking water at a reasonable cost for the foreseeable future.
9. **TFM Assistance** – Assistance related to the technical, financial, or managerial capacity of a public water system provided by the Department or a third party technical assistance provider.

SECTION B: FACTORS THAT ENHANCE OR IMPAIR CAPACITY DEVELOPMENT

Background

Considerable attention was given to addressing Section 1420(c)(2)(B) of the SDWA Amendments of 1996. The Act requires each state to identify the factors that either encourage or impair the technical, financial, and managerial (TFM) capacity of public water systems. States are required to identify institutional, regulatory, financial, tax, and legal factors. A sixth factor category, "other," was added to capture issues outside of the prescribed categories.

The factors operating at the Federal, State, and local level that impair or enhance water system capacity are presented in this section of the report. By definition they are:

- *Institutional – Intergovernmental, cultural, procedural or relationship issues that either enhance or impair the ability of water systems to acquire and/or maintain TFM capabilities*
- *Regulatory – Federal, State or local rules and regulations that affect TFM capacity*
- *Financial – Financial practices, policies or conditions that affect TFM capacity*
- *Tax – Federal, State or local taxation practices, policies or attitudes that affect TFM capacity*
- *Legal – Federal, State or local statutes, interpretations of laws and court decisions that affect TFM capacity*

These factors were drawn from national studies, from the experience of Workgroup members and from knowledge gained by the DHS in administering the drinking water program over the years. The Workgroup identified 237 factors at the Federal, State, and local levels that are either enhancements or impairments to public water system TFM capacity. Table B.1 itemizes the factors by major category.

Table B1: Federal, State, and Local Factors that Affect Water System TFM Capacity

| Factors | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 28 | 43 |
| Regulatory | 22 | 39 |
| Financial | 24 | 37 |
| Tax | 9 | 6 |
| Legal | 4 | 8 |
| Other | 6 | 11 |
| Total | 93 | 144 |

Federal Factors that Enhance or Impair Public Water System TFM Capacity

A. Federal Enhancements to TFM Capacity

Institutional Enhancements:

- The Safe Drinking Water Act, first passed in 1974 and significantly amended in 1986 and 1996 establishes the responsibility of public water systems in protecting the public health through the provision of safe drinking water. The common ground of public health protection provides the statutory and regulatory basis for what States and local water systems must do at a minimum to provide safe water.
- Significant benefits are received by public water systems from the US EPA's investment in training, technical assistance and education programs offered to water systems through the DHS, and EPA's various contractors, grantees, and partners. EPA's sponsorship of operator and system management training and education is a key enhancement to TFM capacity.
- The US EPA is involved in the process of fashioning a State strategy for improving water system capabilities in Maine and offers important guidance and input in the rule making process associated with implementing the 1996 SDWA Amendments.
- US EPA's capacity development guidelines give states flexibility by allowing states to determine what is needed to improve water systems.

- There are several different federal government entities (e.g., US Army Corp of Engineers, USDA Rural Development, USDA NRCS, and HUD CDBG) that are involved with providing services, thus providing more channels to provide help to systems.

Regulatory Enhancements:

- The Safe Drinking Water Act has provided an important common ground for the protection of public health for 25 years. SDWA provides the statutory and regulatory basis for what States and local water systems must do at a minimum to provide safe drinking water.
- Depth and detail of research and the commitment to work with the regulated community and States in determining national standards is an enhancement to TFM capacity.
- Regulations force systems to meet (address) the issues that are most relevant to providing safe drinking water to the public.
- The stakeholder involvement requirements of the 1996 Amendments to SDWA help to ensure that a wide range of drinking water providers and the professionals that support the drinking water industry will be involved in advising the State as to the strategic approach necessary to raise the levels of capability of public water systems.

Financial Enhancements:

- The establishment of the DWSRF, created to assist in the financing of capital improvements to public water systems, is an important new resource for building TFM capacity. Federal resources are authorized and appropriated by Congress for the establishment and enhancement of the DWSRF programs administered by the States.
- The DWSRF allows states to set-aside portions of the state capitalization grants for TFM capacity building. This is a significant source of resources for the states to fund programs for improving the capacity of public water systems.
- The USDA – Rural Development Loan and Grant Program provides a source of capital financing resources for many rural public water systems in Maine. Often, USDA-RD will work closely with State and Federal

agency representatives to package financing for rural utilities.

- The US Housing and Urban Development Agency's Community Development Block Grant Program provides much needed grant financing for public water systems seeking to improve systems for community development purposes. Community Development Block Grant funding often reduces the debt financing needs of systems.
- Support, through the provision of federal funding, circuit riders and other technical assistance through grass root organizations.
- Congress, in amending the SDWA, has included more direction to the USEPA for how the agency should consider recommending new drinking water contaminant monitoring regulations. Congress' attention to requiring more rigorous cost and benefit analysis of proposed contaminants is an enhancement to the regulatory process.
- Water suppliers that meet DWSRF requirements have the opportunity to make capital improvements funded with low interest loans.

Tax Enhancements:

- Ability for small system operators to utilize water system improvements to attain capacity as a capital improvement or operating expense, thereby reducing their taxable income to a small degree.
- Federal tax code has been changed in regards to "Contribution in Aid of Construction" resulting in reduced tax liability for investor owned utilities.

Legal Enhancements: None Noted For Inclusion In *Findings*.

Other Enhancements:

- The emphasis of the Safe Drinking Water Act Amendments of 1996 on certification of water system operators is a de facto recognition of the relationship between the operator competence and the provision of safe drinking water. Identifying operator competence as a primary factor affecting capacity development is an enhancement to TFM capacity building efforts.

Table B2: Federal Factors that Affect Water System TFM Capacity

| Factors | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 5 | 6 |
| Regulatory | 4 | 12 |
| Financial | 7 | 4 |
| Tax | 2 | 2 |
| Legal | 0 | 0 |
| Other | 1 | 0 |
| Total | 19 | 24 |

B. Federal Impairments to TFM Capacity

Institutional Impairments:

- The lack of coordination between US EPA programs has a detrimental affect on the State and the regulated community. US EPA's organization structure, which is designed to reflect pollution "media" areas, may not match State organizational structures creating communication and coordination problems.
- The perceived lack of communication among federal agencies willing to finance water system improvements is recognized as an institutional impairment.
- US EPA seems unwilling to reevaluate standards when science becomes available that demonstrates that current drinking water protection standards are not necessary or that standard levels could be decreased.
- While considerable funding is provided, demand for oversight, assistance programs and capital expenditures outpace Congressional appropriations and administrative budget levels.
- Actions and process focused on larger systems. There is not enough focus on smaller systems. This is perceived as an institutional bias against smaller water systems.
- Congress and US EPA may not fully understand the financial cost of regulatory compliance on water systems in Maine. Maine public water systems operate at a much smaller scale than those systems that seem to have the most input in the design and implementation of environmental statutes and regulations.

Regulatory Impairments:

- The advisory committee recognizes that insufficient in-depth explanation of drinking

water contaminants through well documented health studies is an important impairment to gaining acceptance of regulatory standards at the State and local level.

- The view of Congress and the USEPA that "one size" of regulation "fits all" systems is viewed as an impairment by the regulated community. The advisory committee believes this view is an impairment to the effective implementation of regulatory standards.
- The number of regulated contaminants in drinking water has expanded tremendously since the SDWA was passed in the 1970's. The growing number and complexity of regulations is an impairment in so much as this complexity in the regulations requires higher capacities of management and technical competence, which is especially expensive and difficult to maintain at the small system level.
- The Congressionally imposed time frames that the US EPA and the states must work within to institute new regulations is an impairment. Often US EPA and its state partners have a difficult time meeting the congressional rulemaking standards.
- The dynamic of constant change in drinking water regulations makes it difficult for State regulators and local purveyors to devote attention to long-range horizons for water system operations.
- While US EPA has established working groups for regulatory development, even so, the regulatory process seems to have limited small system input.
- An impairment to the successful implementation of national standards for drinking water is that it is difficult for local purveyors and (in many cases) the part-time boards of directors of those systems to understand the rules writing process.
- Rules and regulations are promulgated by US EPA without complete consideration of the ability of states and local water systems to ultimately implement them. Mandated rules should be implemented with regard to the characteristics of the states. Risk based assessment of need for rule implementation in each state should be considered.
- The growing number and prescriptive nature of regulations are regulatory impairments.

- US EPA's health/risk calculations for new drinking water contaminants are often complex making it difficult for states and the regulated community to understand and explain. The seeming lack of sound scientific analysis in formulating regulatory standards is an impediment to State and local implementation. Thus, new contaminant rules and drinking water standards seem to be based upon politics as opposed to sound science.
- State and local officials must often deal with the uncertainty associated with or arising from the process for adoption of drinking water rules and standards. The sequence of regulatory implementation – sometimes Federal regulations are imposed prior to State action – do not allow the states enough time to react. Federal regulations are often proposed according to Congressionally mandated timetables without giving states the time to respond adequately prior to implementation.
- Science vs. Politics/cost-benefit analysis. Although recent progress has been made in crafting drinking water standards that are cost effective and efficient in protecting the public health, more work needs to be done in the area of providing common-sense information on the standards that are being promoted. Congress is concerned about the implementation of health-based regulations. However, the costs and benefits of those regulations need to be considered; especially in communities that face a variety of demands on limited budgets.

Financial Impairments:

- The cost of monitoring and treatment for contaminants instituted through federal actions is a significant financial impairment for smaller systems.
- The US EPA drinking water needs survey indicates a significant need for capital financing resources. The current funding levels requested by the US EPA and approved by Congress are inadequate to meet funding needs. Federal grant and loan programs should be enhanced. In addition, the DWSRF program should be given a longer authorization/appropriation period by the Congress.
- Set-asides for capacity development and improvement (TFM) programs are tied to

DWSRF capitalization. There is a need for more permanent funding for technical assistance activities for TFM.

- The US EPA does not provide adequate financial resources (in the form of the Public Water Supply Supervision grant) to the Water Supply Section to completely implement the State's expanded responsibilities under the SDWA.

Tax Impairments:

- The capital improvements deduction does not address a business' ability to fund the improvement in the first place. In general, rental properties in Maine tend to be occupied by persons of low income. This will prevent or impair the ability to absorb the costs of capacity through an increase in rental income.
- The Advisory Committee recognizes that while private activity bonds have certain advantages, federally imposed volume caps limit the availability of private activity bonds. Each state's cap is determined by a formula computed as the greater of either \$50 per capita or \$150 million. The Committee suggests that state volume caps be reconsidered in light of the need for public water system capital improvements and the need for diverse sources of capital.

Legal Impairments: None Noted For Inclusion In Findings.

Other Impairments: None Noted For Inclusion In Findings.

State Factors that Enhance or Impair Public Water System TFM Capacity

A. State Enhancements to TFM Capacity

Institutional Enhancements:

- The Maine Drinking Water program is very helpful when contacted with questions about test requirements, compliance and system improvements.

- Public water systems in Maine benefit from four key institutional enhancements: the traditional support of technical assistance and training programs by the DHS and others, a strong field presence of State drinking water program staff, the administrative branch's commitment to strengthen water systems, and the high level of cooperation among State agencies.
- The DHS has had a strong bias towards providing technical assistance and training to its regulated drinking water systems in order to achieve system compliance goals. This underlying bias toward assistance versus enforcement will improve the success of additional, strategic programs to improve TFM capacity.
- The existing network of assistance agencies. Organizations such as Maine Rural Water Association and other State organizations to provide technical assistance are an important enhancement to TFM capacity of public water systems. Information on proper water system operation is routinely disseminated from various State water industry organizations.
- The State of Maine's DHS has assisted in the promotion of voluntary operator certification programs for public water system operators. With these voluntary certification mechanisms in place, Maine is in an excellent position for a transition to mandatory certification program requirements (by the year 2002), which will help ensure that all water systems have the personnel necessary to provide safe drinking water to the public.
- The State of Maine's operator certification program helps to ensure that water systems have capable staff to meet the increasing complexity of requirements in providing safe drinking water to the public.
- The State of Maine has required certification and continuing education of water system operators. The operator certification program provides venues to educate operators on good system management and it leads to discussions with management on infrastructure improvement needs.
- The State laboratory is part of the Regulation & Licensure agency. This institutional proximity enhances the State's institutional capacity to oversee water systems and to improve TFM capacity.
- The State's modest ability to custom-fit federal standards for the protection of drinking water by considering local conditions which may affect certain systems is an important institutional enhancement to TFM capacity building.
- The attitude of the Department is to be supportive of the regulated community. The Department relies on this "work with" attitude rather than a "command and control" approach. The Department is willing to exercise "flexibility" in the oversight of public water systems, while maintaining public protection through safe drinking water.
- DHS training – Numerous educational opportunities via AWWA and others. These regional opportunities allow for training without travel on the part of operators.
- DHS is helping to create networks among systems for technology transfer and technical assistance.

Regulatory Enhancements:

- State land use goals support growth management and the efficient provision of public facilities. In addition, State regulations encourage consolidation of systems.
- The traditional regulatory oversight activities of the Maine PUC help to ensure that PUC-supervised PWSs have the TFM capacities to operate. This is because the PUC includes comprehensive review of financial capacity when evaluating the requests for rate increases by investor owned water utilities. The DHS, in partnership with the PUC provides oversight of the technical and management capabilities of these public water systems.
- A uniform system of accounts should be adopted for use throughout the state.
- The 1986 SDWA Amendments allowed the creation of State-authorized programs for issuing monitoring waivers to public water systems. Maine's monitoring waiver program, funded in part by system user fees has created

significant cost savings for public water systems.

- Enhanced coordination of water monitoring and protection programs is essential. Provide for the funding, collection and interpretation of water monitoring data into a centralized database, and making it accessible, retrievable, and understandable. The primary focus of watershed protection should be to utilize local agencies and individuals for coordinated, sustainable programs (regional or statewide). Monitoring and protection programs developed using this approach would have more scientific validity and would provide information and resources that would be truly beneficial to State leadership, water system officials and the general public in making informed decisions.
- The State needs to become pro-active in assisting systems and/or communities in identifying the problem areas and outline what options are available to make the necessary changes and/or improvements. Facilitating the long range planning which may include capitalization, consolidation, privatization, etc.
- Operator certification – Maine has a strong operator certification program, which enhances capacity.
- Survival Guides: The Maine Drinking Water Program has developed and distributed user-friendly guidance documents for water system officials.
- DHS has a reasonably good knowledge of upcoming regulations and involves and informs stakeholder organizations of the regulations while they are under development and also prior to their enactment. Field staff work well with systems on regulations.
- The State is in a strong regulatory position to prevent the use of State dollars for system improvements without TFM capacity standards being met.
- Through its regulatory program, the State provides assistance with, and review of, the technical and management capabilities of public water systems.
- The Cross Connection Control Program is an enhancement to the TFM capabilities of public water systems.
- Generally, a regulatory enhancement to TFM capacity is the State's ability to require meters

to receive USDA–RD, Community Development Block Grant, and DWSRF funding.

- The current regulatory framework that directs the Maine DHS to oversee technical and managerial aspects of all public water systems provides a basis for including financial aspects in the standard review of systems.

Financial Enhancements:

- Corrective action for a small system will, to a great degree, be proportionately less expensive than the same corrective action on a larger system. The end result will not be the expenditure of a disproportionately large amount of money to service a small population
- The State of Maine has provided significant financial and administrative resources for the coordination of important sources of capital financing for water system improvements.
- The State of Maine has authorized the sale of bonds to support a grant and loan program for rural water and wastewater infrastructure improvements.
- The State has the ability to establish priorities for the expenditure of public funds. For example, the State has been able to provide government money to local governments that truly need it. Meeting the need of systems with nitrate standard violations is an example of this ability to target funding to key problems in the State.
- An enhancement to the improvement of system TFM capability would be to increase the percentage of the DWSRF that could be used for grants to systems seeking to improve TFM capacity.
- The State of Maine provides matching funds to access Federal dollars for its public water program. This commitment to providing state matching funds is a financial enhancement to TFM capacity.
- An enhancement to the TFM capacity of systems that have difficulty making system improvements and maintaining affordable utility rates is the ability of the State to allow grants or forgive loans to systems making TFM progress.
- Multiple funding sources provided by the Federal and State governments [e.g., DWSRF

and Department of Economic Development (USDA-RD, HUD), etc.] are available to make difficult financing challenges more viable.

- DHS Water Supply Section receives revenues from State-imposed quarterly operating fees paid by regulated water systems.
- The State has an excellent financial position and provides hands-on assistance when requested. Public systems can apply for funding assistance when they need help.
- The State has capital improvement grants, low cost loan programs, and DWSRF set-asides as available funding sources. Small grants to fund minor but critical upgrades are important and available through the State.

Tax Enhancements:

- Tax exempt bonds are available to fund infrastructure projects in municipalities.
- Exemption of state sales taxes for purchasing materials and exemption of property taxation for publicly owned and rural water systems.
- There is not a State tax on utilities, thus relieving them of some financial burden.

Legal Enhancements:

- The State of Maine respects the authority of local governments.
- When compliance is an issue, it would be an enhancement to capacity if the State regulatory agency could provide or arrange for help to local governments to explain and enforce these rules.

Other Enhancements:

- By emphasizing the need for TFM capacity, stakeholder organizations reinforce the relationship of TFM and successful operation of public water systems.
- The State's "one call" system before digging creates a measure of protection for water system facilities that might be damaged through improper ground moving activities.
- Maine benefits from some strong citizen concern about drinking water issues. Maine's citizens are well served by the advocacy of stakeholder organizations.

- Maine is primarily made up of districts. Districts have authority through State charters and private and special laws.

Table B3: State Factors that Affect Water System TFM Capacity

| Factors | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 12 | 17 |
| Regulatory | 14 | 12 |
| Financial | 11 | 14 |
| Tax | 3 | 4 |
| Legal | 2 | 5 |
| Other | 4 | 3 |
| Total | 46 | 55 |

B. State Impairments to TFM Capacity

Institutional Impairments:

- The rate of Drinking Water Program employee turnover seems quite high. It can become difficult to build a solid working relationship with any one person.
- When a department is in a state of turnover, continuity as it pertains to policy and procedure can become lost.
- State institutional impairments exist because of limitations of resources available for local system training and insufficient staffing to promote and provide technical assistance.
- There is a lack of coordination between State agencies that have a role in protecting public health and the environment relative to safe drinking water. While agencies and programs may have clear missions relative to drinking water, coordination of resources – notably for strategic efforts to improve TFM – may be viewed as interference by the DHS.
- Improving TFM capabilities of public water systems will require additional resources for information, education and technical assistance programs. There is a lack of adequate funding for oversight activities in the financial and management capacity areas; the drinking water program does not have the resources and methods in place to adequately measure and assess the financial and management capabilities of public water systems subject to the TFM provisions of the SDWA. Current program resources and personnel are limited in this regard.

- Consistent with other states' drinking water programs, the inability of the Department to hire adequate staff to keep pace with the scope of the drinking water protection statutes and regulations is a serious impairment to improving the TFM capacity of systems. States such as Maine are forced by personnel limitations to consider the minimum programmatic responses to system needs, not the optimum level of programmatic resources.
- An impairment worthy of senior management consideration is the division of public drinking water system oversight and assistance between the agency and the Department.
- Similar to the impairment mentioned above is the division of water policy and regulation concerns between several State agencies and commissions.
- Many small systems. It is difficult to provide Drinking Water Program information, training, and assistance to a large number of small water systems.
- The people of the State view water as a free resource and place little value on its use. Most people find it hard to believe that Maine's water is not always clean and drinkable.
- Lack of overall resources to provide technical support and training.
- Confusion about use of State discretion. Due to low funding availability, the State provides minimal services. The State needs to be more proactive. For example, there is a need to move to a "Technical Assistance" mode. Current Drinking Water Program activities reflect regulatory enforcement pattern of operation.
- Interdepartmental and intradepartmental issues are impairments to capacity building activities. Intradepartmental issues relative to headquarters office control and field office discretion make programmatic implementations difficult. Also, coordination needs to be improved between water and wastewater sections of the agency.
- Some water system compliance areas are regulated by Health Dept. (fluoride, backflow prevention programs) and others by DHS or both. This institutional "disconnect" is confusing for the regulated community and inefficient for the State.
- The operations and support of the water systems are traditionally not viewed as a high priority.
- The DHS is responsible for assisting in the development of TFM capabilities and is also the enforcement agency. This dual role inhibits cooperation on the part of regulated systems. Modifications in DHS interaction with water systems to reflect the agency's desire to build capacity through partnerships with the regulated systems could overcome this barrier.
- Coordination between State Lab and Drinking Water Program needs improvement. Lab makes too many errors in data reporting.

Regulatory Impairments:

- Due to the complexity of drinking water system requirements, water systems have incomplete information about the body of regulations regarding the provision of safe drinking water. The current volume of rules, regulations, requirements and guidance relative to public water systems is difficult to master, especially by the limited staff of small systems. Because of this fact, the information to be monitored by systems, and the fact this information is dynamic, systems with limited TFM capacity have trouble keeping up with regulatory changes. New regulatory requirements will be problematic, i.e., operator certification requirements.
- Currently, grant process rewards poor operations and management – systems that take care of business and have resources are neglected by the program standards of grant and loan providers. This disincentive situation or seeming "incentive to do a bad job" is an impairment to TFM capacity building.

- Public water systems face regulatory oversight from multiple agencies. Current lack of formal coordination between these regulatory agencies is an impairment to capacity development. In the case of PUC-regulated public water systems, traditional rate making practices may have the unintended effect of discouraging long-term financial capacity in favor of short-term financial management and planning practices. Rate base regulation, a presumption of contribution of capital, general disallowance for reserve accounts, and the costs involved in filing rate cases may negatively affect the long-term financial and technical viability of regulated water systems. Only municipal water systems can reserve water system funds for future investment in the system.
- Historically, the impression of the regulated community, service providers and stakeholders has been that there is irregular and inconsistent review of public water systems, including enforcement proceedings when necessary. It is important to note that *this has not been the case* where clear public health emergencies exist. Capacity development is impaired when regulated systems believe that corrective actions on their part are not absolutely required.
- The State does not have a public outreach system to help systems fill out forms, notify systems regarding new and/or changing regulations, educating systems on TFM capacity building requirements and consequences, etc. A need exists for a central clearinghouse for technical information and training resources.
- PUC has not always been effective.
- For small systems, the ability to understand complex regulations and requirements is limited by lack of management capacity.
- Currently in Maine there is a lack of incentives and regulatory flexibility that could encourage greater sharing of managerial and technical resources between neighboring communities.
- Inconsistency of enforcement.
- Programmatic implementation of regulations that allow the approval of sub-optimal system plans, the lack of enforceable design standards, and the reluctance of the Drinking Water Program to enforce conservation of water are all impairments to system capacity.
- Capacity development is impaired when regulated systems believe that corrective actions on their part are not absolutely required. Corrective actions – those that ultimately improve TFM capacity – are often prompted by enforcement.
- Current drinking water regulations are generally prescriptive. This is an impairment to the extent that they restrict the use of alternative processes for meeting the goals of public health protection. The establishment of performance based regulations for meeting drinking water rule requirements would be an enhancement to TFM capacity. Performance based standards would allow for lower cost technical solutions (when appropriate) to overcome compliance problems. Prescriptive, process-oriented standards are an impairment to achieving technical capability.

Financial Impairments:

- Required improvements might be better attained through a low interest loan program made available to a system based on the potential uncorrected health hazard, and not on the number of users within the system. Injury to ten families should carry the same weight as injury to one thousand families.
- Water system changes (improvements) affecting quality can be costly. Cost however, should not be an impairment to water safety. Water systems, large or small, private or public, should not be subsidized by government grants or giveaways.
- Private systems are not allowed by the PUC to create reserves. This limits the rate-regulated systems from accumulating resources for system improvements. At the drinking water program level, there is limited funding available for corrective field evaluations, e.g., sanitary surveys and other system contacts by field staff.

- The water system funding activities of many public water systems are regulated (Locally “self-regulated”) by elected officials. Because of the political nature of setting fees and charges for water service, this often leads to long term financial capacity problems as systems are under-financed.
 - Limited funding resources and assistance programs for small privately owned water systems.
 - No standard form of accounting is required of systems. Other financial management standards and requirements (such as periodic audit requirements) are needed. Water use and the performance water utility operations need to correspond to accounting information.
 - The perception that there is inadequate funding for resources to enable the State water supply program to provide flexibility in dealing with systems on a case-by-case basis and provide more frequent visits by field office staff.
 - Lack of communication and coordination amongst funders – enhanced commitment of State dollars and the coordination between departments for funding like projects is needed.
 - State legislature not appropriating matching DWSRF funds (bonds have to be sold for matching funds) so there are no grant funds or zero interest loans.
 - Public water systems do not trust DHS use of drinking water fees and therefore do not support increases in the fees.
 - There are no incentives for privately owned public water systems to participate in TFM.
 - The State is encouraging piped water systems to be constructed. However, the long-term cost of operating and maintaining these systems has not been factored into the design and construction of these systems. As a result, a large majority of these systems are out of compliance with monitoring requirements, and are in need of major repairs within several years.
 - State’s lack of funding for local governments – there are declining resources and funds are being used up.
 - Except for those regulated by the PUC, public water systems are financially "self-regulated." For example, municipal water system operations are enterprise fund (fee and rate supported or "private business-like") activities regulated by elected officials. Constituent pressure often leads to rate structures incapable of sustaining long-term financial stability. Self-regulated systems generally receive no additional review and advice regarding the financing of operations, capital improvements, etc.
- Tax Impairments:
- It would be very helpful if a type of tax increment financing were available whereby water quality improvements would be paid for by the system owner. Then those costs would be amortized over a given number of years and each year the scheduled amount would be forgiven in the form of a tax reduction. A program such as this would give business owners tangible incentive to attain compliance.
 - The current statutory restrictions on local government budgeting (i.e., property tax and budget limitations) have a direct effect on public water system finances. Revenue raising limitations negatively affect the successful administration of municipal fee and rate supported activities. State limitations on local budgets force an overall cap on municipal revenues, to the extent that water utility finances are in effect "commingled" with the balance of municipal government activities, instead of being allowed to be presented separately in accordance to municipal accounting standards. Local government taxation limitations have a direct and potentially negative effect on the long-term financial health of public water systems.
 - Nobody wants a tax increase.
 - The sentiment against tax increases of all kinds (including “non-tax” increase for utility fees and charges) is an impairment.

Legal Impairments:

- Maine water law impairs public water systems from protecting water wells in that surface water and groundwater systems are not integrated and it is often unclear to what extent the systems can control a quantity or quality of a particular water source.
- Maine land use and zoning law impairs public water systems from protecting water wells because municipalities have limited jurisdiction over land use outside of a very limited area. Also, municipal authority is limited to adjacent land that is of an urban nature.
- There is an increasing use of lawsuits to get states to enforce drinking water regulations.
- Pending urban sprawl legislation could limit annexations and therefore limit the ability of a municipality to grow and expand territories. This will create a legal barrier to system consolidation goals expressed in SDWA.
- According to current statutory restrictions, many small private water systems are ineligible to receive DWSRF financing.

Other Impairments:

- There are impediments to the use of land use authorities by local entities where annexation and other land use decisions could have an impact on TFM capacity.
- The Department has difficulty in getting very small and non-community systems involved in its training and technical assistance programs. While this is a local issue, the failure of the State's promotions to get desired participation is a shared impairment.
- Maine is primarily made up of districts. Districts have authority through State charters and private and special laws.

Local Factors that Enhance or Impair Public Water System TFM Capacity

A. Local Enhancements to TFM Capacity

Institutional Enhancements:

- Maine's strong tradition of local control translates in to better community understanding and commitment to addressing community needs, such as the provision of safe drinking water. Local recognition of performance heightens institutional commitment to provide efficient and effective local services.
- The current network of governmental and non-government assistance agencies such as the American Water Works Association.
- An enhancement to capacity at the local level would be the broader use of circuit riders to build institutional capacity.
- Keeping accurate records regarding the water system is essential to management. Improving the water system's maintenance and use of system information – an institutional enhancement – would improve management capacity.
- Local programs that recognize the efforts of water system staff to gain operator certification and to maintain certification would be an institutional enhancement.
- Water systems can gain efficiency by sharing equipment with other local systems. As inter-local agreements are established, institutional enhancements will occur and will most likely establish a pattern of cooperation for other common interests.
- Consumer Confidence Reports can improve the public's awareness of their drinking water system. This requirement is an institutional enhancement to TFM capacity.
- Local water system operators have a genuine concern for water quality – system operators drink the water they are serving. This commitment to quality is an institutional enhancement and can be credited to an integration of TFM capabilities at the system level.
- Funding for programs and activities that provide training and education at the local level (non-regulatory programs) are enhancements to capacity.

- The current regional and statewide meetings of various stakeholder groups such as AWWA provide excellent opportunities for TFM capacity building.
- Public education campaigns, including provision of Consumer Confidence Reports, could serve as catalysts for greater public involvement in water system issues. Citizen and customer awareness of TFM benchmarks and challenges could have the indirect benefit of creating broader acceptance of requests for financial resources necessary to maintain adequate TFM capabilities. Increasing general public awareness of the cost of providing safe drinking water is an institutional enhancement.

Regulatory Enhancements:

- Local control also means that local entities have the flexibility to react to changes in rules, regulations and expectations of the regulatory entities.
- Municipal governments have the authority to regulate and control or to prohibit cross-connections.
- Local water systems are able to request help from the State when noncompliance is an issue. This is an example of how a state regulatory enhancement clearly transfers to the local level as a regulatory enhancement.
- Water systems at the local level have enough discretion and “have the power” to make decisions that will enhance TFM capacity.

Financial Enhancements:

- Elected officials or Utility Board members appointed by locally elected officials have the authority to initiate financing for capital projects.
- Costs are impossible to avoid; however, by allowing the State and local governments to develop a more reasonable and flexible plan to address risk in-lieu-of federal governmental regulation, the financial costs could be better controlled and managed.
- A local financial enhancement is their flexibility in making and financing priority decisions.

- An enhancement to financial capacity would be adherence to the principle that water revenues and expenditures be separate from other utility revenue and expenditures. This allows for a clear expression of the financial activity of the water system separate from sewer, solid waste, and other utility functions.
- Water rates are the primary source of revenue for a water system. An enhancement to financial capacity would be to encourage the proper periodic review of (and if needed adjustments in) water rates.
- The water system funding activities of many public water systems are regulated (locally “self-regulated”) by elected officials. Because of the political nature of setting fees and charges for water service, financing decisions are best handled locally by local officials. Elected officials have the authority to initiate financing for capital projects.

Tax Enhancements:

- Local taxes help to support public owned systems.
- Taxes cannot be used to support a private system; however, taxes may be used to buy a private system and make it part of the public system (consolidation).
- At the local level, water systems have options in spending tax revenues. Where these options can be exercised with the long-term interests of the system in mind, such flexibility is an enhancement to TFM capacity.
- The philosophy that water system revenue should be used (whenever possible) to offset the full water system costs is an enhancement to financial capacity. To the extent that tax policy at the local level supports this philosophy, this is a tax enhancement.

Legal Enhancements:

- Municipal water systems and other multi-purpose governments usually have the capacity to sufficiently address legal issues arising from water system operations. To that extent, local support of legal capacity is an enhancement.

- Authority for rural water districts and public wholesale water supplies

Other Enhancements:

- Local water systems exhibit characteristics for cooperation with other communities, agencies.

Table B4: Local Factors that Affect Water System TFM Capacity

| Factors | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 11 | 20 |
| Regulatory | 4 | 15 |
| Financial | 6 | 19 |
| Tax | 4 | 0 |
| Legal | 2 | 3 |
| Other | 1 | 8 |
| Total | 28 | 65 |

B. Local Impairments to TFM Capacity

Institutional Impairments:

- High turnover in elected officials. Limited number of individuals willing to get involved with management.
- Water systems do not generally recognize the need to operate in a business-like fashion. There is a lack of planning and evaluation, poor financial management and budgeting (including capital budgeting), and a lack of training available for management. Management capacity of smaller water systems is negatively affected by high turnover of board members. A resistance to regulators prescribing how systems should be managed and operated also affects the acquisition of institutional capacity.
- Systems are reluctant to raise rates to meet the complete costs of providing safe drinking water. Due to the high turnover of board members and the general reluctance to raise fees for service, many board members have never been involved in cost of service studies or rate setting. Additionally, the public does not know true cost of providing safe water. Further, fees needed to meet the costs of providing this essential public service are inappropriately equated with taxes.
- Lack of understanding of Federal, State, and local agencies and responsibilities.

- General lack of willingness of public water system boards to plan for and finance long term improvements.
- Water system customers seem to "take for granted" that safe drinking water is simple and inexpensive to produce. Generally, since service rates have been low traditionally, safe drinking water is both under-priced and under-valued. Maine's citizens expect water to be provided at low cost regardless of system demands or regulatory requirements.
- For a variety of reasons, the majority of small public water systems employ flat rate pricing structures. Flat rate pricing is inherently inequitable where costs for serving different customer groups can be identified. While simple to administer, flat rate pricing can prevent customers from knowing the true cost of providing safe water and create consumption habits that strain the technical capabilities of aging or expanding water systems.
- The operations and support of public water systems is traditionally not viewed as a high local priority.
- Inherently, the smaller water systems will always face a greater challenge since they lack the economy of scale or resources available to the larger utility systems. The continued provision of an ample supply of safe drinking water at an "affordable price" will only be possible through increased cooperation or collaborative efforts among the utilities.
- Long-term viability of a water system is enhanced when communities and their respective governing boards recognize the most critical element to accomplishing this goal – a professional staff with the access to necessary resources and funding. Small communities often do not possess the resources for sustainability. In addition, there is high turn over in management. A manifestation of a commitment to long-term viability would be the development and funding of an ongoing capital improvements program.
- Distrust of regulatory and stakeholder organizations.

- In many cases there are excellent county health departments available to assist public water systems through the work of county sanitarians. However, county health departments and DHS have not fully developed a good working relationship. DHS does not have the capacity to help train county staff nor to effectively coordinate to enhance TFM capacity.
- Many system operators do other things than just operate water systems.
- The ability to understand complex regulations and requirements is limited by lack of trained management personnel.
- Lack of communication between elected officials and employees of water systems.
- Unwillingness of local systems and towns to give up individuality and control.
- In some small water systems there are difficulties in attracting and retaining qualified water system personnel.
- In small water systems, there is an unwillingness or inability to allow staff to attend training. This unwillingness is often related to the fact that one person is responsible for several key infrastructure operations and has inadequate backup.
- The benefits of water system consolidation – both operations and/or management – are outweighed by the unwillingness of local systems and towns to give up individuality and control.
- An emerging issue in Maine is the inability of small water systems to attract board members.
- There is a general failure of small public water systems to know and understand the complete body of statutes, rules and regulations governing their operations. General lack of technical and management capacity at the small system level translates into inability to understand and adjust to the myriad of changes in the regulatory framework governing the provision of safe drinking water.
- In rural areas the lack of development planning is related to the economical provision of safe drinking water.
- Current limitations in training opportunities in the area of SDWA statutes, rules, regulations and guidance are an impairment to the ability of public water systems to maintain management capacity necessary for continued compliance with drinking water requirements.
- Limited staff at the local level impairs the ability of the water system to establish and exercise local regulatory authority. If it could be established, this local regulation would supplement State regulatory efforts.
- While local land use decisions can have a significant impact on the water system, planning authorities do not have to consider TFM capacities when planning for growth.
- Local rules requiring employees to reside within the community may limit a community's ability to hire and retain a certified operator or other key water system staff. Such policies may also be an impediment to sharing operator expertise.
- In reacting to regulatory directives, local officials do not like to be “told” what to do by other governmental officials. At the same time, they may be slow to take corrective action on their own.
- Communication on regulations currently is primarily between operators and State and/or federal officials. There is little communication with elected officials and private owners/boards.
- Platting and zoning are too often politically motivated. Organized areas can be regulated through local government.

Regulatory Impairments:

- Water availability, pressure, quantity and quality are usually only considered when development occurs in our larger cities where community development departments exist. Even then it is often confined to a fire protection standpoint, usually addressing quantity and pressure.
- Water system boards often do not know the regulations or how they are made.

- There is a lack of training required for management oversight groups such as boards, councils, etc. This is directly related to the need to establish institutional memory mentioned above. For example, the water superintendent or a representative of management should also be required to maintain continuing education credits – that would provide a means to educate a city or town concerning the needs for capacity and/or infrastructure improvements.
- Enforcement of local water ordinances is an expensive undertaking. The cost of police, inspectors, and processing citations is something that small local governments cannot afford. However, it is the local water ordinances that have the greatest chance of affecting change in the residents because they are created and commented upon at the local level.
- There is very little positive stimulus being put forward as to reasons the community should comply with regulatory requirements. Education explaining that compliance with the regulations creates a safe and healthy environment appears to be an afterthought. The main reasons given for the need to comply are – to avoid fines, which they cannot or will not pay anyhow; to obtain grants to build systems, that they cannot afford to maintain; or so that the State can be awarded the full amount of loan funding from the federal government (most communities do not use the loan program anyway). More education on the TFM capacity building requirements and consequences will be needed.
- Planning authorities are not currently required to specifically consider water system TFM capacities when planning for growth. This means that development decisions can be made without knowledge of the water service providers' TFM capabilities. In many cases, development decisions are completely independent of public water system information due to the separate operations of local planning authorities and private, not-for-profit, or municipal water systems. Land use statutes should be modified to reflect the need for consideration of TFM capabilities of all public water systems directly affected by potential (probable) land use decisions.

Financial Impairments:

- Water systems are inadequately funded due to rate structures that do not generate sufficient revenues. The lack of revenues results in systems not having the resources to hire staff or meet other expenses. This is exacerbated and/or results from a lack of support by customers for the proper financial support of the system.
- Many small rural water systems serve communities made up of “senior” citizens who are not interested in raising rates to support building a system in 10 – 20 years that they won’t be around to benefit from.
- The lack of planning for current and future capital facilities is a significant impairment. Capital facilities planning have a direct effect on the TFM capabilities of smaller public water systems. The failure to recognize necessary future improvements to the technical facilities due to expansion or regulatory requirements often results in water systems being ill prepared to react to the need for financial resources necessary to construct and operate their facilities.
- Financial management capabilities are limited in many small public water systems. Staff and management teams need specific training and technical assistance to manage their financial resources and to protect the integrity of their water systems.
- The sheer number of small public water systems implies that many lack the economies of scale necessary to efficiently operate. Numerous systems would be in a better position to achieve compliance and to improve TFM capabilities if their customer bases were large enough to sufficiently finance current operations and fund future operations on a sustainable basis.
- It is difficult for an otherwise eligible applicant to demonstrate that the entity has the levels of low to moderate income residents necessary to obtain financial assistance where income level is a key eligibility criteria.

- Cost per connection can be very high for infrastructure improvements in very small systems. This financial impairment often prevents systems from seeking financing for improvements necessary to meet compliance standards.
- A financial impairment at the local level is the inability of small systems to develop an adequate water rate system and to obtain the assistance necessary to establish adequate revenues for the near and long-term. Currently it is difficult to convince board members that the system needs to be self-supporting.
- Because of the age of some systems, they are in need of a complete overhaul. Communities cannot afford the sudden financial impact of renovating their water systems to meet current standards. Capital financing planning and training necessary to meet long-term replacement needs is needed and the lack of the same is a financial impairment.
- Some small systems lack the economies of scale necessary for compliance and the ability to gain economies of scale by effectively working with neighboring systems.
- Many water systems are run by elected officials. The perception among some of these officials is that it does not seem prudent to do long-term planning and finance improvements because negative reaction to such expenses may “cost” one’s position.
- Too many small systems cannot afford all the testing and regulatory requirements. In addition, the cost of new treatment to meet regulatory standards may exceed “reasonable” rate levels.
- Difficulty in convincing board members and/or elected officials that the system needs to fully support itself with its revenue.
- Many water systems in Maine lack financial resources and the knowledge of financial resource management. This current impairment to capacity could be overcome through training and technical assistance programs. Financial management capacity is limited in many small systems. This results in a lack of funds to hire staff, allow them time for training, etc.
- Cost of new treatment may exceed “reasonable” rate levels.
- Citizen pressure to “hold the line” on taxes (and user fees) is placed on public water system’s board members who are then reluctant to raise user charges to appropriate levels.
- There is a lack of appropriate funding mechanisms for small systems. For example, low cost financing for small projects.
- Economies of scale are lacking for many small water systems.
- Some small communities tend to view jobs as a way to distribute money within the community. They will often create a lot of job sharing to employ several people. This reasoning is also used to refuse contracting some services such as payroll, billing, etc. that could be performed at a lower cost and more efficiently by a contractor. Hiring a contractor would mean eliminating a paycheck for someone in the community.

Tax Impairments: None Noted For Inclusion In Findings.

Legal Impairments:

- Perceived or actual liability related to the use of jointly owned equipment and jointly hired personnel may prevent increases in TFM capability.
- Because the cost of legal advice is perceived as too high for most small systems, these systems lack this important management capability.
- Lack of land use regulation contributes to the proliferation of water systems. Zoning authority (which could be used to foster consolidation and efficient expansion of systems) is often unclear.

Other Impairments:

- The lack of clear guidelines regarding water system security and the uniform implementation of security policies could present liability and of TFM problem if not addressed strategically.

- Local planning entities are not uniformly available across the State of Maine. This lack of available local land use and long-range planning entities may place many water systems at a disadvantage. Professional planners could be trained to incorporate TFM principles into their decision-making processes.
- Local leaders seeking funding to make system improvements often do not understand what are appropriate engineering and other professional service fees to be charged for project development.
- Specific geologic conditions (radionuclides, arsenic, and sulfate) create special compliance problems for Maine's public water systems.
- Only a small labor pool is available.
- The isolation of many communities from equipment and material suppliers makes it expensive to operate a water system. Isolation from other water systems reduces the options for sharing equipment and makes it expensive for the operator.
- Strong suspicion of regulatory agencies derived from rural anti-government attitudes may prevent the effective implementation of TFM programs designed to assist rural water systems in complying with State and Federal drinking water protection standards.
- Lack of public interest in TFM issues.

SECTION C: RECOMMENDATIONS ON HOW THE STATE CAN USE ITS AUTHORITY AND RESOURCES TO HELP WATER SYSTEMS IMPROVE CAPACITY

Following its work of identifying and discussing the factors that encourage or impair capacity development, the Workgroup directed its attention to forming a set of recommendations for program elements designed to address the need for improving the TFM capabilities of regulated public water systems. The Workgroup's recommendations take into consideration the following:

- 21 non-prioritized recommendations.
- The program elements are suggested in response to significant TFM enhancements and impairments identified in Section B of this *Report of Findings*. These program elements represent efforts the State of Maine, its cooperating local governments; and public, not-for-profit, and private partners can undertake to improve TFM capabilities.
- Generally, the impairments to TFM are problems that need to be addressed by public water system regulators and the regulated community. The programs listed in this section of the report are suggested to overcome TFM capacity problems in public water systems.
- The suggested program elements are presented without specific schedules for implementation or ranking. The purpose of this section of the report is to present programs for improving TFM capabilities without regard to implementation demands. The program elements presented do not include specific recommendations regarding responsibility for implementation by the DHS Drinking Water Program or other stakeholders. Ultimate responsibility for implementation of selected program elements remains with the DHS as the primacy agency for the State of Maine. However, it is expected that the DHS will seek assistance from other stakeholders and service providers in improving the TFM capabilities of drinking water systems.

Program Recommendations: 21 Elements for Improving the Technical, Financial, and Managerial Capabilities of Public Water Systems:

Enhanced Sanitary Survey. DHS should develop and utilize an enhanced sanitary survey that will permit DHS field staff to periodically collect technical, management, and financial information about each of the State's regulated water systems. This information could then be used in a strategic sense to identify those water systems most in need of assistance to improve TFM capabilities.

TFM Self-Assessment Tool. It is recommended that a self-assessment tool be developed and provided to public water systems. This tool could then be used by water systems prior to (or in the interim period between) an DHS enhanced sanitary survey to identify strengths and weaknesses of TFM capability. The self-assessment tool would be based upon common criteria for TFM capacity similar to those used in the review of Drinking Water State Revolving Loan applications.

Fiscal Capacity and Financial Management Measuring Tool. Several states require public water systems to develop and submit for agency review a water system business plan. However, many small water systems do not have information about the need for business planning or a resource or guide to constructing a business plan. Many problems associated with management capacity and financial planning could be offset through the implementation of water system plans, especially among the majority of private, not-for-profit systems. A business planning guidebook, provided to all public water systems by the DHS would be an effective resource for building TFM capabilities.

Use of Independent Studies. DHS should provide data gleaned from third parties to illustrate how consolidation can save drinking water systems money, in addition to the efficiencies that can be gained as a result. The use of non-government studies will help expel the impression that DHS is dictating that systems consolidate.

Change in PUC Regulation of Small Private Systems. The Public Utilities Commission of Maine is encouraged to examine whether its current regulation and oversight activities encourage the support and development of TFM capacities. Consideration should be given to identifying, recommending and/or implementing required changes in statutes and Commission rules. In addition, the PUC should consider changes necessary for regulated systems to meeting the capacity standards applicable to municipal and other self-regulated water systems. [Note: TFM information may need to be collected to demonstrate the need for PUC regulatory changes.]

Finance & Management Training for Drinking Water Systems. Fiscal capacity and financial management are two of the key components of the financial capacity. Adequate funding of water system operations is essential to the current and future need to provide safe drinking water to the public. Training opportunities to review rates is important to sustaining the fiscal health of the water system. Yet, the majorities of small water systems in the State of Maine do not routinely review and adjust water service charges to keep pace with revenue demands. It is recommended that water system rate setting and financial management training and technical assistance be provided to water systems as well as State and federal agency personnel in order to improve financial and management capacity.

Enforcement of Requirements for Use of Water Metering Devices. Achieving and maintaining technical capacity of a water system is closely tied to managing the water resources available for public consumption. The usage of metering devices per water source (e.g., wellheads or intake manifolds) enable water system managers to track overall system capacity performance. The Workgroup recommends the use of meters adequate to accurately reflect water system use. Given the direct relationship between full cost pricing of water and financial capacity, it is recommended that the State actively enforce its rules relative to water meter use.

Incorporating Drinking Water Capacity Issues into Local Planning Activities. The identification of enhancements and impairments to capacity of public water systems prompted the Workgroup to investigate intergovernmental relationships that affect water system regulation and oversight. This led to consideration of the land-use decisions of local governments and how those decisions could encourage the proliferation of drinking water systems in the State. DHS should act as a technical resource to help communities and cities acquire the information they need to understand drinking water capacity issues and incorporate these in their planning efforts. This would include considering opportunities for consolidation of existing systems and assurance of adequate capacity in new ones. This is especially relevant in developments occurring in unincorporated areas adjacent to the existing municipal, not-for-profit, and PUC-regulated public water systems. Making better use of existing facilities when development occurs yield better economies of scale in water system operations.

Dissemination of Information. The State Drinking Water Program should provide information to public water systems that is proactive, accurate, and understandable. In running their operations like businesses, it is important for public water system managers to know about prospective changes in statutes and regulations that have a direct bearing on their TFM capabilities. There are benefits associated with water systems knowing about important changes in statutes and regulations; in providing operators, managers, board members and the customers with understandable timelines for regulatory implementation; and, for "common sense" interpretations and guidance on important public water system requirements.

TFM Training for DHS Drinking Water Program Staff and Contractors. In implementing its capacity assessment program for DWSRF and newly established public water systems, the California Health Services Division conducted four regional training events for its drinking water program staff, county health officers and Public Utilities Commission staff. The four two-day training events provided detailed information on TFM capacity and included hands-on case study exercises. In the short-term, the Maine DHS should prepare training materials and provide similar workshops for its central and regional office staff, and Maine PUC staff.

Loan Guarantee Program for Private Financing of System Improvements. Funding capital improvements to not-for-profit and privately owned public water systems has often required system owners to secure loans with their personal assets. The banking community often requires this collateral as risk protection for the provision of capital. Since current and future needs for capital resources will exceed the moneys available from the DWSRF, the Committee believes that private capital resources should be better leveraged through the use of a private financing loan guarantee program. This program, secured through state appropriations, DWSRF interest earnings, or other means, would encourage commercial banks and other local lenders to participate in the financing of public water system improvements. The State of Maine is encouraged, when implementing the proposed loan guarantee program, to give top priority in the use of the fund to those not-for-profit and private systems seeking to consolidate operations with other like-minded public water systems. [Note: Innovative financing programs, such as "linked deposit" programs currently utilized by some states for wastewater facility financing should also be investigated for applicability for private, not-for-profit water systems.]

Statutory Change Regarding Private System DWSRF Loan Eligibility. The State of Maine should change State statutes to reflect the national trends that private water providers be eligible for appropriate DWSRF loan funds and grants. At present, 34 states make these monies available to private water systems. One possibility would be to provide these funds only to private utilities that are economically regulated by the PUC. Providing funding to private systems could also serve as a tool to assist the DHS in enforcement activities by providing monetary incentives for desired TFM activity and other compliance.

Handbook on Drinking Water System Statutes and Rules. It is recommended that a specific handbook on statutes and regulations relative to public drinking water systems be produced and distributed. The purpose of the handbook would be to provide "plain English" information on the Federal and State statutes, regulations, rules and guidance relative to the capacity requirements and all other requirements of the SDWA. The format should be both print and electronic; incorporating multimedia presentations. The key to the production and delivery of the handbook will be training sessions for water system operators, managers and customers.

Improving Intergovernmental Relations for TFM Capacity-Building. The DHS Drinking Water Program is not alone in building the TFM capacity of public water systems. The Public Utilities Commission of Maine regulates water utilities by certifying qualified providers of water; and by ensuring that they provide safe and adequate services and facilities at just and reasonable rates, terms, and conditions. The State Fire Marshall is involved in enforcing State fire, building and safety codes that impact water system operations (technical and financial capacity). At every reasonable opportunity the DHS should encourage cooperation among State agencies and between levels of government on matters affecting drinking water systems.

Proactive Public Education. A significant theme identified in the process of discovering the impairments to TFM capacity of public water systems was the need to improve the knowledge of drinking water protection rules among operation and management personnel. Often rules and regulations are produced in forms that are difficult for small system operators and managers to interpret. The Workgroup felt that information provided to operators regarding current rules and future regulation development should be improved. Additionally, water systems that have limited managerial capabilities have difficulty in tracking regulatory changes from their inception as proposed rules to their adoption as actual State standards. The following items were suggested as possible responses to this recommendation:

- Offering Continuing Education Units (CEUs) for: hands-on field training of system operators; anyone attending management and administration courses; and/or attendance at rules hearings or meeting, meetings on regulations, serving on committees, etc.
- Mailing of an annual rules status update to all water system operators, owners, engineers, etc.
- An effort to improve management capacity through on-site board member training. Special focus would be placed on long-term planning for the system, financial management and full cost financing for the system, and regulatory environmental and financial controls.
- Move toward creating a website that contains current information and links to relevant agencies, sites, etc.

- Incentives for schools to include water treatment and supply as a curriculum topic.
- Requiring consistent definitions of regulations and policies between Federal agencies, State agencies, etc.

Availability of Program Resources. For numerous years, the Drinking Water Program of DHS has been burdened with having to deliver a State drinking water protection program with limited resources. The scope of the drinking water protection program has been dramatically increased due to the last two amendments to the Safe Drinking Water Act in 1986 and 1996. The perception of the Workgroup is that personnel resources have not kept pace with the new responsibilities of the State program. The Workgroup recommends that assessment of current and future program resource needs provide information needed to overcome this perception and allow the Workgroup and other stakeholders to support the financial and staffing resource needs in the Drinking Water Program. The Workgroup recognizes that the proper implementation of a TFM capacity strategy is tied directly to the availability of program resources. The Workgroup, as concerned stakeholders, believes that it (as well as the public) should be involved in examining existing program resources and what supplements might be needed to implement the strategy. Additionally, the Workgroup could work on behalf of the public water systems that would benefit from TFM programs to help persuade policy makers to provide appropriate resources for strategy success. While the public review of the State's implementation plan for the strategy is expected at some point, the Workgroup believes that its early involvement in the process is important.

Business Planning Guidebook. Several states require public water systems to develop and submit for agency review a water system business plan. However, many small water systems do not have information about the need for business planning or a resource or guide to constructing a business plan. Many problems associated with management capacity and financial planning could be offset through the implementation of water system plans, especially among the majority of private, not-for-profit systems. A business planning guidebook, provided to all public water systems by the DHS would be an effective resource for building TFM capabilities.

Education Campaign for Consumer Confidence Reports. Management accountability for the delivery of safe drinking water by public water systems will be improved through the provision of consumer confidence reports as required by the SDWA Amendments of 1996. This requirement as implemented will provide the general public with substantial information regarding the quality of their water. The State Drinking Water Program should be actively involved in an education campaign designed to heighten the awareness of the general public regarding the information contained in the consumer confidence reports.

Capital Facilities Management Plans. The long-term sustainability of Maine's drinking water systems requires that they plan for investment in their physical facilities. Capital facilities investment maximizes the useful life of the public water system facilities and accommodates annual wear and tear in the existing system, systems expansions due to growth in the customer base and improvements required by new regulations. The DHS should require public water systems to plan for this investment in their capital facilities by developing Capital Facilities Management Plans (CFMPs). These plans would combine both long-range capital budgets with accurate system inventory processes. The decision to provide assistance in the development of CFMPs may be triggered by the financial capacity assessment process which may be included in the sanitary survey of a PWS, an examination of TFM capacity relative to DWSRF loan applications, or non-routine inspection of a PWS due to compliance problems. For DWSRF applicants, CFMP should be required as either a prerequisite for loan applications or as a condition of DWSRF loan approval. The DWSRF should be considered as a source of funding for developing CFMPs.

Programs for TFM Peer Review. The DHS should establish and financially support programs that encourage local public water systems to build networks for peer review, information exchange, and sharing technical services. Because the DHS is a regulatory agency, public water systems may not choose first to take advantage of Drinking Water Program assistance that is available. By encouraging local network forums where TFM capacity is discussed, water systems may improve their capabilities by simply interacting with their peers. In the case of private or not-for-profit water systems, the State may benefit from the creation of area-wide forums for TFM cooperation and networking.

Massachusetts-type Model Capacity Assistance Program. The DHS may choose to utilize the Massachusetts-type model for matching capacity assistance service providers to needy systems in order to improve the TFM capacity of public water systems. In the Massachusetts model selected water systems are first examined to determine capacity deficiencies. Then, the Drinking Water Program, its contractors, or other service providers provide technical assistance. The function of "matchmaking" needy systems with technical assistance providers could reside with an Advisory Committee, which includes representatives of the variety of assistance providers in the State. A Massachusetts model program would have the greatest applicability in helping to solve chronic and multiple TFM capacity deficiencies (what are commonly consider to be "basket case" systems) in a number of small water systems every year.

MEASURING THE SUCCESS OF MAINE'S CAPACITY DEVELOPMENT STRATEGY

This *Report of Findings* offers the Workgroup's suggestions about how the DHS might develop a strategy for improving the technical, financial, and managerial capabilities of public water systems. In developing that strategy, the Workgroup suggests that the DHS measure the success of its capacity development efforts in three ways:

1. Compliance Tracking

In accordance with the prioritization schematic presented in Section A, the first criterion in selecting water systems for attention under the Capacity Development Strategy is compliance history – the assumption is that a history of non-compliance reflects a lack of capacity. The DHS should consider tracking the compliance of systems that are chosen for assistance under the strategy. Statewide trends in compliance, such as might be indicated by the triennial report to the US EPA on systems with a history of non-compliance, are complicated by a large number of contributing factors which may not relate to system capacity. System-specific compliance tracking will more accurately measure the effectiveness of the capacity building efforts carried out under the strategy.

2. Outreach and Assistance

The DHS should keep careful records of assistance programs aimed at assisting water systems in improving capacity. The Workgroup has recommended a range of efforts of this kind in Section C of this report. Examples include, but are not limited to:

- a) Decrease in number of deficiencies found through sanitary surveys.
- b) Reduction in number of emergency calls for technical assistance.
- c) Tally of specified training events, attendance, and tracking CEU's.

- d) Number of systems with properly certified operators. Water system operators are essential to the management capacity of any drinking water system. Monitoring the proper staffing of water system operations could be an important tool in measuring management capabilities of water systems.
- e) Number of water systems that request self-assessments for improvement. Comparison of assessments taken before and after receiving assistance would be particularly useful.
- f) Reduction of systems on the SNC list.

A count of the activities carried out under the Strategy is an indicator of the magnitude of the effort, but only indirectly a measure of effectiveness. Whenever possible, the DHS should follow capacity assistance efforts with some type of system specific assessment at a later date to determine if the assistance was effective and the results that were obtained had lasting value.

The US EPA State Drinking Water Information System would be a good place to track capacity assessments, assistance, and follow-up efforts. A consumer survey could be developed for use in soliciting feedback from systems that have received assistance under the Capacity Development Strategy. This survey would be mailed to the system within a few weeks of the time that assistance was given. Results from these surveys, and from other tracking activities, would be used to modify the strategy over time, placing emphasis on those elements that are successful and trimming activities that prove to be less useful.

3. Planning Activities

The number of water systems that prepare business, and/or financial plans or complete capacity self-assessments each year would be a good indicator of the success of the Strategy because it would reflect growing knowledge about, and interest in, capacity issues on the part of public water systems in the State.

SECTION E: PUBLIC INVOLVEMENT IN PREPARING THE MAINE CAPACITY DEVELOPMENT REPORT OF FINDINGS

The DHS called upon its Workgroup to provide a sounding board on issues for developing a set of findings for improving capacity that could then be presented to the general public. Workgroup members, by combining their varied backgrounds and different perspectives, deliberated to ensure that the group's *Report of Findings* would be balanced and comprehensive.

However, the Workgroup could not possibly encompass in its membership all organizations and individuals within the State who might have an interest in this subject. In its first meeting, the Workgroup examined the question of who else should be involved in the process of preparing a drinking water Capacity Development Strategy. They concluded that certain key interest groups, beyond those already represented, should be encouraged to participate with the Workgroup if at all possible.

Other Public Involvement Initiatives

The DHS and its Workgroup were in agreement that due to the timing of Maine's Strategy development efforts, and of the Drinking Water Program's lack of controversy and additional requirements, statewide public meetings were not likely to be well attended, and thus prove ineffective. Alternately, Maine relied upon an open-forum approach to public involvement during the Strategy development process. Workgroup meeting announcements, minutes, and progress reports were distributed to an extensive mailing list of relevant parties and those interested but unable to participate. All recipients were strongly encourage to assist the State by sharing word of the DHS/Workgroup capacity development efforts with any relevant parties and organizations they felt could benefit the cause. It was made clear throughout the proceedings that this was an open process, into which any interested person or organization could join at any time. DHS staff contacts were made publicly available for questions and comments on capacity issues through the dispatches described above, as well as through distribution via and Drinking Water program newsletter and website.

APPENDIX A: CAPACITY DEVELOPMENT WORKGROUP MEETING HIGHLIGHTS

The Workgroup met 3 times during 1999 and 2000 to consider developing a Capacity Development Strategy for public water systems. Meeting times and locations were made available to Workgroup members, DHS personnel, other interested organizations, and the general public through mailings. There is a public record associated with these meetings. Persons wishing to obtain a more detailed record of the proceedings may do so by contacting the Maine Department of Human Services at (207) 287-2070.

Highlights of the Maine Workgroup

November 4, 1999

The Drinking Water Program reviewed the five programmatic elements of state capacity development strategies, which are required by the SDWA. The Workgroup then began an open discussion geared toward further defining and clarifying the scope of these five elements in addition to US EPA expectations for states' responses to them. Workgroup members agreed that the five elements were best tackled sequentially rather than the order listed in the SDWA and subsequent guidance materials. It was agreed that Item E, public input/relevant party identification, should be worked on early in the process. Similarly, Item D, baseline identification methods, should also be dealt with in the beginning. Item C, which is essentially the core description of what the state strategy will include, and will likely be the final piece to become complete.

February 17, 2000

The Workgroup met via teleconference link with EFC participants Bill Jarocki and Symantha Zeimet. Bill Jarocki presented an overview of capacity development as per SDWA, required strategy elements, and an overview of the similarities and differences of approaches that have been used by other states. The Workgroup then began a discussion regarding how best to approach this undertaking given the remaining timeframe. It was decided that gleaning information from other states' efforts, while bearing in mind situations and circumstances unique to the State of Maine, would be the best starting point in drafting the *Report of Findings*.

May 2, 2000

The meeting began with a review of the teleconference in February, the existing system program and requirements, and a recap of the EFC's role on behalf of other states. The Workgroup then began a discussion on Item B, enhancements and impairments at the federal, state, and local levels. Item A, prioritizing systems, was then discussed. Non-compliance was determined to be the key initial indicator. Criteria and schematics from the State of Iowa will serve as a basis for the Maine prioritization scheme.